

## CLAIMS:

What is claimed is:

1. A method for georeferencing a raster map image,  
comprising the steps of:  
displaying a raster map and a georeferenced map;  
identifying at least two geographically corresponding  
points on the raster map and on the georeferenced  
map;  
associating an image coordinate of each point on the  
raster map with a geographic coordinate of the  
corresponding point on the georeferenced map;  
determining a functional relationship between the image  
coordinates and the geographic coordinates; and  
thereafter, for each additional corresponding points  
identified on the raster map and the georeferenced  
map,  
revising the functional relationship between the  
image coordinates and the geographic  
coordinates according to the additional  
corresponding points, and  
disregarding any points which are substantially  
inconsistent with the functional  
relationship.
2. The method of claim 1, further comprising the step of:  
using the functional relationship to determine the  
geographic coordinates of features on the raster  
map.

1 3. The method of claim 1, further comprising the step of:  
2 storing the functional relationship with the raster  
3 map.

1 4. The method of claim 1, further comprising the step of:  
2 when the raster map is manipulated by a user,  
3 manipulating the georeferenced map accordingly.

5. The method of claim 1, wherein the geographic  
coordinates are latitude and longitude.

6. The method of claim 1, wherein the raster map and the  
georeferenced map are displayed on the same computer  
display.

7. The method of claim 1, wherein the corresponding points  
are marked by a user after visually determining  
geographically corresponding points.

1 8. The method of claim 1, wherein the functional  
2 relationship is represented by a set of general linear  
3 functions.

4 9. A computer system, having at least a processor  
5 connected to communicate with a readable and writeable  
6 memory, comprising:  
7 means for displaying a raster map and a georeferenced  
8 map;  
9 means for identifying at least two geographically  
10 corresponding points on the raster map and on the  
11 georeferenced map;  
12 means for associating an image coordinate of the each  
13 point on the raster map with a geographic  
14 coordinate of the corresponding point on the  
15 georeferenced map;  
16 means for determining a functional relationship between  
17 the image coordinates and the geographic  
18 coordinates; and  
19 for each additional corresponding points identified on  
20 the raster map and the georeferenced map,  
21 means for revising the functional relationship  
22 between the image coordinates and the  
23 geographic coordinates according to the  
24 additional corresponding points, and  
25 means for disregarding any points which are  
26 substantially inconsistent with the  
27 functional relationship.

1 10. The system of claim 9, further comprising:  
2 means for using the functional relationship to  
3 determine the geographic coordinates of features  
4 on the raster map.

1 11. The system of claim 9, further comprising:  
2 means for storing the functional relationship with the  
3 raster map.

1 12. The system of claim 9, further comprising:  
2 means for, when the raster map is manipulated by a  
3 user, manipulating the georeferenced map  
4 accordingly.

1 13. The system of claim 9, wherein the geographic  
2 coordinates are latitude and longitude.

1 14. The system of claim 9, wherein the raster map and the  
2 georeferenced map are displayed on the same computer  
3 display.

1 15. The system of claim 9, wherein the corresponding points  
2 are marked by a user after visually determining  
3 geographically corresponding points.

1 16. The system of claim 9, wherein the functional  
2 relationship is represented by a set of general linear  
3 functions.

00571E0"5042E350

ADJ  
A8